

Cat. No. 12-808  
**OWNER'S MANUAL**

Please read before using this equipment.

# Multiband PLL Radio

**with Direct Key Entry**

**OPTIMUS®**

## FEATURES

Your Optimus Multiband PLL Radio is designed for your active lifestyle. Its portable, lightweight design lets you listen to music, sports, or news almost anywhere you go. The radio tunes the AM, FM, SW (short wave), TV sound, and weather bands. The radio's alarm clock and sleep timer features make it convenient for daily use.

Your radio's features include:

**50 Station Memory** — lets you store ten stations in each band into memory for easy access.

**Five Band Selection** — lets you listen to AM, FM, SW, TV sound, and weather stations.

**Direct Entry for AM/FM/SW** — lets you enter a station's frequency to easily tune it.

**Backlit Liquid-Crystal Digital Display** — clearly shows the time and the currently selected station.

**Dual Time** — lets you keep track of the time in a different time zone.

**Alarm Clock** — turns on the radio automatically at a time you set.

**Sleep Timer** — plays the radio for up to 90 minutes then automatically turns it off.

**Built-in 3" Speaker** — provides quality sound that you can share with others.

**Earphone Jack** — lets you connect earphones or headphones (not supplied) to the radio.

**Three Power Sources** — lets you power your radio from internal batteries, your vehicle's cigarette-lighter socket (using an optional DC adapter), or AC power (using an optional AC adapter).

**PLL Tuning** — the radio's digital phase-locked loop synthesizer provides drift-free frequency tuning with the highest degree of accuracy and stability.

**Lock Switch** — prevents you from accidentally changing the tuned frequency.

**DX/LOC (Sensitivity) Switch** — lets you set the radio for the best reception of distant or local stations.

## PREPARATION

### CONNECTING POWER

Your radio requires four AA batteries (not supplied) for power and two AAA batteries (not supplied) for clock and memory backup. For the best performance and longest life, we recommend RadioShack alkaline batteries.

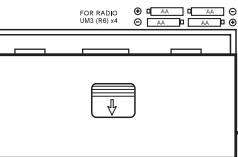
#### Cautions:

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

You can also use optional nickel-cadmium (Ni-Cd) batteries to power your radio. Before you use Ni-Cd batteries, you must charge them with a separate battery charger (available at your local RadioShack store).

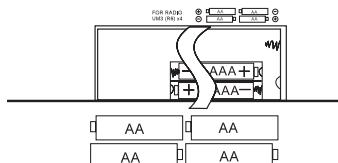
Follow these steps to install batteries.

1. Slide the battery compartment cover in the direction of the arrow to remove it.



2. Place two AAA batteries in the compartment and on top of the attached ribbon, as indicated by the polarity symbols (+ and -) marked above the compartment.
3. Place four AA batteries in the compartment as indicated by the polarity symbols (+ and -) marked outside and above the compartment.

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4. Replace the cover.

When the radio does not receive usually strong FM stations or if it stops operating properly and **■** flashes, replace the AA batteries. Replace the AAA batteries about every six months.

**Note:** To prevent losing the station memory, and alarm settings, replace the AAA batteries within 30 seconds.

**Warning:** Dispose of old batteries promptly and properly. Do not burn or bury them.

**Caution:** If you do not plan to use the radio for several months, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

**Important:** This radio can use nickel-cadmium rechargeable batteries. At the end of a nickel-cadmium battery's useful life, it must be recycled or disposed of properly. Contact your local, county, or state hazardous waste management authorities for information on recycling or disposal programs in your area or call 1-800-843-7422. Some options that might be available are: municipal curbside collection, drop-off boxes at retailers such as your local RadioShack store, recycling collection centers, and mail-back programs.



## Connecting an AC Adapter

You can power the radio using a 6V, 300-mA AC adapter and a size M Adaptaplug® adapter (neither supplied). Both are available at your local RadioShack store.

### Cautions:



You must use a Class 2 power source that supplies 6V DC and delivers at least 300 mA.

Its center tip must be set to positive and its plug must fit the radio's **DC 6V** jack. Using an adapter that does not meet these specifications could damage the radio or the adapter.

- Always connect the AC adapter to the radio before you connect it to AC power. When you finish, disconnect the adapter from AC power before you disconnect it from the radio.

Connect the Adaptaplug adapter to the AC adapter, plug the adapter into your radio's **DC 6V** jack, then plug the other end of the adapter into a standard AC outlet.

## Connecting a DC Adapter

You can power the radio from a vehicle's 12V cigarette-lighter socket or similar power source using a 6V, 300-mA DC adapter and a size M Adaptaplug adapter (neither supplied). Both are available at your local RadioShack store.

### Cautions:



You must use a power source that supplies 6V DC and delivers at least 300 mA. Its center tip must be set to positive and its plug must fit the radio's **DC 6V** jack. Using an adapter that does not meet these specifications could damage the radio or the adapter.

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- Always connect the DC adapter to the radio before you connect it to the power source. When you finish, disconnect the adapter from the power source before you disconnect it from the radio.

Set the adapter's voltage switch to **6V**, connect the Adaptaplug adapter to the DC adapter, plug the adapter into your radio's **DC 6V** jack, then plug the other end of the adapter into your vehicle's 12V power source socket.

**Note:** If the radio does not charge properly, unplug the adapter from the cigarette-lighter socket and clean the socket to remove ashes and debris.

## USING EARPHONES OR HEADPHONES

The radio has a built-in speaker to listen to but you can use stereo earphones or headphones (not supplied) with a 1/8-inch (3.5-mm) plug to listen privately.

Insert the earphones' plug into the radio's earphone jack.

**Note:** The built-in speaker disconnects when you connect an earphone or headphones.

## Listening Safely

To protect your hearing, follow these guidelines when you use earphones or headphones.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.

- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

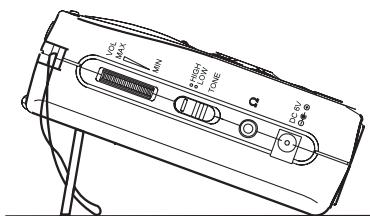
## Traffic Safety

Do not wear earphones or headphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and could be illegal in some areas.

Even though some earphones or headphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.

## USING THE STAND

You can use the radio's stand to set the radio at an angle so you can easily see the display. Simply lift the stand away from the back of the radio and set the radio on a flat surface.



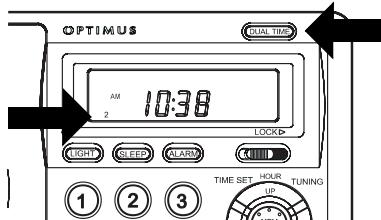
## OPERATION

### USING THE CLOCK

You can use the clock to keep track of the time in two different time zones.

Follow these steps for each time zone to set the clock in that zone.

1. Press **POWER ON/OFF** to turn off the radio, then press **DUAL TIME** to select Time 1 or Time 2. 1 or 2 appears.



2. Press **MEM/TIME**. The display flashes.
3. Within 5 seconds, repeatedly press or hold down **HOUR** to set the hour. Then repeatedly press or hold down **MIN** to set the minute.

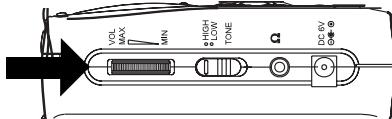
#### Notes:

- **PM** appears when the clock displays a PM hour. **AM** appears when the clock displays an AM hour.
- When you change the minute setting for a time zone, the radio automatically changes the minute setting for the other time zone.

To view both time zones while the radio is on, hold down **DUAL TIME** for 3 seconds. The time zone last displayed appears. Press **DUAL TIME** again to view the other time zone.

### TUNING THE RADIO

1. Turn **VOL** to its lowest setting, then lift and fully extend the antenna.



2. Press **POWER ON/OFF** to turn on the radio. The last tuned frequency appears.
3. Slide **BAND AM/FM/SW/TV/WX** to the desired band. If you select AM, **MW** appears.
4. If you set **AM/FM/SW/TV/WX** to **FM**, **SW**, **TV**, or **WX**, set **SENS** (sensitivity) to **LOC** to receive strong local signals, or set it to **DX** to improve reception of a weak station.

5. Repeatedly press **TUNING UP** or **DOWN** to tune to the desired station.

**Note:** To automatically tune the radio to the next strong signal, hold down **TUNING UP** or **DOWN** for about 2 seconds.

Or, use the number keys to directly enter the band (AM/FM/SW only) and frequency you want to tune. For example, to tune FM station 97.1, slide **AM/FM/SW/TV/WX** to **FM** then press **FM 9 7 1** then **FM** again. Enter the entire AM/SW frequency even if the last number is 0. **ERR** appears if the frequency is out of the selected range.

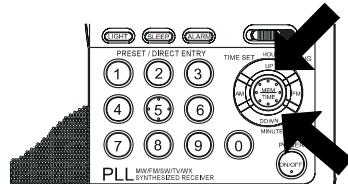
6. Adjust **VOL** to a comfortable listening level.
7. Slide **TONE** to **HIGH** or **LOW** to suit your listening preference.
8. To turn off the radio, press **POWER ON/OFF** again.

## USING THE STATION MEMORIES

You can store 10 stations in each band into memory (for a total of 50 stored stations) and quickly recall each station.

Follow these steps to store a station.

1. Turn on the radio and select a band (see "Tuning the Radio" on Page 6).
2. Repeatedly press **TUNING UP** or **DOWN** to tune to the station you want to store.



3. Press **MEM/TIME**. **MEMO** flashes.
4. Within 5 seconds, repeatedly press a number button (0-9) to store a station in a memory location from 1 (1) through 10 (0). The memory number appears.
5. Press **MEM/TIME** again to store the station.

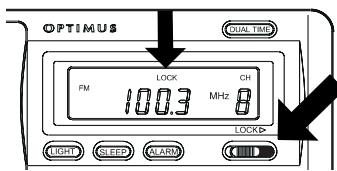
### Notes:

- If you do not store a station within 5 seconds, **MEMO** disappears. Repeat Steps 3-5.
- To replace a stored station, store a different station in its location.

To tune a stored station, press the desired station's number button (1-9, or 0 for 10). The number (1-10) of the selected memory location appears.

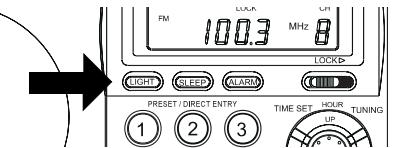
## USING LOCK

To avoid accidentally changing any front panel setting, slide **LOCK** to the right. A red indicator panel appears on the left end of the switch and **LOCK** appears above the frequency.



## LIGHTING THE DISPLAY

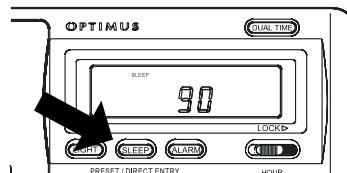
To light the display for easy viewing in low-light situations, hold down **LIGHT**.



## USING THE SLEEP TIMER

The sleep timer lets you go to sleep with the radio playing. The radio plays for up to 90 minutes, then automatically turns off.

1. Tune to the desired station.
2. Press **POWER ON/OFF** (if necessary) to turn off the radio
3. To have the radio play for 90 minutes, press **SLEEP**. **SLEEP** and **90** appear and the radio turns on.



To have the radio play for less than 90 minutes, repeatedly press **SLEEP**. With each press, the displayed number (representing how many minutes the radio is set to play) decreases by 10.

**Notes:**

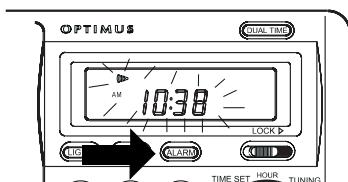
- To turn off the Sleep Timer but let the radio play, press **SLEEP**.
- To turn off the radio and the sleep timer, press **POWER**.

## USING THE ALARM

You can set your radio to automatically turn on at a time you set. The alarm setting applies to both dual time settings. For example, if Time 1 is set to Eastern time and Time 2 is set to Pacific time, the alarm will wake you at the same time in either zone. You need not readjust the alarm setting if you change time zones.

### Setting the Alarm Time

1. Press **ALARM**. The display flashes and **((((•** appears.



2. Within 5 seconds, repeatedly press or hold down **HOUR** to set the alarm hour.
3. Within 5 seconds, repeatedly press or hold down **MIN** to set the alarm minute. The alarm time is set and **((((•** appears steadily indicating that the alarm is on.

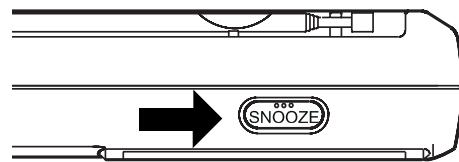
### Turning the Alarm On and Off

1. Turn on the radio and tune to the station you want to hear at the set alarm time.
2. Adjust the volume to the desired level.
3. Turn off the radio.
4. Repeatedly press **ALARM** until **((((•** appears to turn on the alarm.

At the set alarm time, the radio turns on and plays until you turn it off. To turn off the alarm so it does not sound again the next day, repeatedly press **ALARM** until **((((•** disappears.

### Using SNOOZE

To silence the alarm but have it sound again in a few minutes, press **SNOOZE** after the radio turns on. This silences the radio for about 9 minutes. You can press **SNOOZE** as many times as you like.



## CARE AND MAINTENANCE

Your Optimus Multiband PLL Radio is an example of superior design and craftsmanship. The following suggestions will help you care for your radio so you can enjoy it for years.



Keep the radio dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.



Use and store the radio only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.



Keep the radio away from dust and dirt, which can cause premature wear of parts.



Handle the radio gently and carefully. Dropping it can damage circuit boards and cases and can cause the radio to work improperly.



Use only fresh batteries of the required size and recommended type. Batteries can leak chemicals that damage your radio's electronic parts.



Wipe the radio with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the radio.

Modifying or tampering with the radio's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your radio is not performing as it should, take it to your local RadioShack store for assistance.

## THE FCC WANTS YOU TO KNOW

Your radio might cause TV or radio interference even when it is operating properly. To determine whether your radio is causing the interference, turn off your radio. If the interference goes away, your radio is causing it. Try to eliminate the interference by:

- moving your radio away from the receiver
- connecting your radio to an outlet that is on a different electrical circuit from the receiver
- contacting your local RadioShack store for help

If you cannot eliminate the interference, the FCC requires that you stop using your radio.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the *FCC Rules*. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your local RadioShack store or an experienced radio/TV technician for help.
- If you cannot eliminate the interference, the FCC requires that you stop using your Multiband Radio.

## FCC DECLARATION OF CONFORMITY

This device complies with Part 15 of the *FCC Rules*. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Product:	Portable Multiband Radio
Model:	12-808
Responsible Party:	RadioShack 100 Throckmorton Fort Worth, TX 76102
Phone:	817-415-3200



## SPECIFICATIONS

### Frequencies:

AM .....	530–1710 kHz
FM .....	88–108 MHz
SW .....	3.8–12.5 MHz
TV .....	CH2–CH13
WX .....	162.4–162.55 MHz

Power Sources ..... 2 AAA (Memory Backup) and 4 AA (Power) Batteries  
AC and DC Adapter 6V DC, 300 mA

Dimensions (HWD) ..... 5 × 8<sup>2</sup>/3 × 1<sup>3</sup>/4 Inches  
(127 × 220 × 45 mm)

Weight (without batteries) ..... 1 lb 5 oz  
(600 g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

### Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX 76102

*We Service What We Sell*

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Fort Worth, Texas 76102

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Printed in Hong Kong